A CURRENT LIMITER CIRCUIT AND A METHOD OF CONTROLLING CURRENT BETWEEN A POWER SUPPLY SOURCE AND A POWER SUPPLY CAPACITOR OF A POWER SUPPLY

ABSTRACT

There is provided a current limiter circuit and a method of controlling current between a power supply source and a power supply capacitor of a power supply, the circuit comprising an input node connectable to the power supply source; an output node connectable to the power supply capacitor; a first MOSFET transistor and a second MOSFET transistor coupled in series between the input node and the output node; a current limiter element coupled in parallel with the second MOSFET transistor; a controller comprising a controller output for controlling operations of the first and second MOSFET transistors; and a delay circuit coupled to the controller output, said delay circuit for providing a time delay to signals at the controller output; wherein during powering up of the power supply source, the controller is configured to switch on the first MOSFET transistor such that current flows between the input node and the output node via the current limiter element; and switch on the second MOSFET transistor after the time delay, such that current flows between the input node and the output node bypassing the current limiter element.

FIG. 1